



ENERGY FUTURES  
— INITIATIVE —



## FRANKLIN ORR, JR.

*Advisory Board Member*

Franklin (Lynn) Orr served as the Under Secretary for Science and Energy from December 2014 to January 2017. As the Under Secretary, he was the principal advisor to the Secretary and Deputy Secretary on clean energy technologies and science and energy research initiatives. Orr was the inaugural Under Secretary for the office, which was created by Secretary of Energy Ernest Moniz to closely integrate DOE's basic science, applied research, technology development, and deployment efforts. He oversaw DOE's offices of Electricity Delivery and Energy Reliability, Energy Efficiency and Renewable Energy, Fossil Energy, Indian Energy Policy and Programs, Nuclear Energy, and Science. In total, these programs steward the majority of DOE's National Laboratories (13 of 17).

He was director of the Precourt Institute for Energy at Stanford from its establishment in 2009 to 2013. He served as director of the Stanford Global Climate and Energy Project from 2002 to 2008. Orr was the Chester Naramore Dean of the School of Earth Sciences at Stanford University from 1994 to 2002 and has been a member of the Stanford faculty since 1985. He holds the Keleen and Carlton Beal Chair of Petroleum Engineering in the Department of Energy Resources Engineering and was a Senior Fellow at the Woods Institute for the Environment and the Precourt Institute for Energy. His research activities focus on how complex fluid mixtures flow in the porous rocks in the Earth's crust, the design of gas injection processes for enhanced oil recovery, and CO<sub>2</sub> storage in subsurface formations.

Orr was also head of the miscible flooding section at the New Mexico Petroleum Recovery Research Center, the New Mexico Institute of Mining and Technology from 1978 to 1985, a research engineer at the Shell Development Company Bellaire Research Center from 1976 to 1978, and assistant to the director of the Office of Federal Activities at the U.S. Environmental Protection Agency from 1970 to 1972. He is a member of the National Academy of Engineering and also served as a member of the Board of Directors of the Monterey Bay Aquarium Research Institute from 1987 to 2014 and rejoined that board in 2017. He was a member of the Board of Trustees of the David and Lucile Packard Foundation from 1999 to 2008, for which he has also chaired the Science Advisory Panel for the Packard Fellowships in Science and Engineering from 1988 to 2014, rejoining that panel in 2017, and was a foundation board member from 1999-2008. He served as a member of the 2008/09 National Research Council Committee on America's Energy Future. He is a member of the ClimateWorks Foundation Board of Directors. Orr holds a Ph.D. from the University of Minnesota and a B.S. from Stanford University, both in Chemical Engineering.